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### Mothers Attitudes toward Non-Nutritive (Pacifier) Sucking Habits In Their Children

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#### الخلاصة

**الهدف:** تهدف تقييم اتجاهات الأمهات اللواتي لديهن أطفال اقل من خمسة سنوات في كيفية استعمالهن إلهات لأطفالهن  
**المنهجية:** أجريت الدراسة في المركز الصحي الوحيد في ناحية شوخان لمحافظة نينوى للفترة ما بين 30 - تشرين الثاني - 2011 ولغاية 1- ميس -2012 اختيرت عينة 210 من الأمهات اللواتي لديهن أطفال اقل من خمسة سنوات تم جمع البيانات عن طريق ملئ استمارات الاستبيان ومقابلة الأمهات الراغبات المشاركة بالبحث تم تحليل البيانات باستخدام التحليل الإحصائي الوصفي (التكرارات، النسبة المئوية، الوسط الحسابي) والتحليل الإحصائي الاستنتاجي ( )  
**النتائج:** بينت نتائج الدراسة بأن معدل العمر الأمهات (35.12) لديهن اقل او يساوي ( )  
التعليم الابتدائي وأغلبهن متزوجات ونسبة (123, 64.4%) يستخدمن اللهاث أثناء نوم أطفالهن كما أشارت الدراسة بوجود علاقة ذات دلالة إحصائية ما بين الخصائص الديمغرافية الاجتماعية (مستوى التعليمي والحالة الاجتماعية) لهؤلاء الأمهات ومدخلاتهن لمنع استعمال إلهات لأطفالهن  
**الاستنتاج:** استنتجت الدراسة بوجود نسبة انتشار عالية لاستعمال إلهات من قبل الأمهات في هذه الدراسة  
**التوصيات:** توضيح المعلومات بشكل إرشادات عن كيفية استعمال إلهات بشكل صحيح وسليم في جميع المراكز الصحية لزيادة أدراك الوالدين للهاث

#### Objectives:

The main objective of the present study is to assess the mother's attitude toward pacifier habits in their children.

**Methods:** A cross-sectional descriptive study was carried out in primary health care center in Cherra-suburban Shekhon Sector in Musil Governorate/ Iraq from 30/ November /2011 to 1/May/2012. A convenience sample of 210 mothers with their children under the age of five years old was selected. Data were collected by the mothers' interview and analyzed by using the programmed through the application descriptive statistical frequency and percentage and inferential statistical analysis by Chi-square Test.

**Results:** The present study shows that the majority of mother's age were between (21-30) years old, most of them were housewives with low educational level .High prevalence using pacifier in this study and majority of them ( 64.4% ,123 ) were using pacifier for getting quite sleeping to their children .There were highly significant association between (mother's educational level, socio-economical status) with mother's intervention used to stop sucking of pacifier at p-value 0.01.

**Conclusion :** Sucking habits had a high prevalence by mothers in this study.

**Recommendation:** The study recommends to provide information about safe and appropriate use of pacifiers with guidance in all primary health care centers to increase parents' awareness toward pacifier.

**Keywords:** Sucking, pacifier, mother, Socio-economic status, education.

#### INTRODUCTION:

Sucking is an important milestone for any baby and it starts in the twentieth weeks of pregnancy <sup>(1)</sup>. It is important in the development on feeding of mother's breast or on her own thumb, hand, or lips or sucking on a pacifier <sup>(2)</sup>. Pacifiers are often believed to be harmless or even necessary and beneficial for infants' development <sup>(3)</sup>. There are many studies mentioned that the pacifiers are protective effect and reduce painful procedures <sup>(4)</sup>, self soothing and non-nutritive sucking in the term and preterm infant makes them feel happy, and learn their world <sup>(5)</sup>.

Some studies said that using pacifier provides some children with sense of security during difficult periods, or when they are separated from their parents, or surrounded by strangers and in an unfamiliar environment<sup>(6)</sup>, also they added to provide relaxation, and induce sleep. For this reason, young children may suck their thumbs or pacifier in the evening or when they are tired<sup>(7)</sup>. The decision of using or not a pacifier is made by mother<sup>(8)</sup>. Mother is the person who responsible for the child rearing and important factor in elimination of this habit, the attitude regarding sucking habits vary from one population on another according to the culture, beliefs and awareness as well as socio-economic status<sup>(9)</sup>. Pacifier-sucking habits increased by a prevalence of 75% to 79% in industrialized western countries in recent decades<sup>(10)</sup> and in Saudi Arabia about 48.36%<sup>(3)</sup>. In Iranian a study shows that, the rate of current or previous pacifier sucking was 26.6% and of finger sucking was 10.6%.<sup>(11)</sup> In Kurdistan Region there is no published study regarding the mothers' attitude and (pacifier) sucking habits in their children, which is necessary for future planning to improve child's health. The aims of this study are to assess the mothers' attitude toward (pacifier) sucking habits and to find out the association between social-demographic characteristics of mothers with their attitude and intervention techniques, which used to stop the sucking of pacifier in their children.

## **SUBJECT AND METHODS:**

A perspective study was conducted in PHCC Cherra-suburban Shekhon Sector in Musil Governorate from the 30/ November /2011 to 1/May/2012. A convenience sample of 210 mothers with their child age less than 5 years old was selected, the criteria of the sample are: mother lives Cherra-suburban Shekhon Sector in Musil Governorate and attends Primary Health Center for routine follow up for their child, infant at age < 5years, full term, normal healthy (free from diseases and congenital malformation, non twins with birth weight of 2500gm or greater and youngest child in the family.

For the purpose of this study, a written official permission has been obtained from PHCC Cherra-suburban Shekhon Sector in Musil Governorate, following human subject approval from the mothers' participants in this study.

A questionnaire form designed by the investigators which consist of three parts: the first part deals the demographic and social characteristics of parents which as age, level of education of parents, parent's occupation, social- economic status and crowding index, the second part includes the information regarding the mother opinions about reason for using pacifier and the third one takes into consideration of the intervention techniques which used by mothers to stop the sucking-pacifier in their children.

The scores for the study items was used 2 for yes and 1 for no. The questions take (15-25) minutes to be answered through the time of collecting the data. Data were collected by the mothers' interview and analyzed by using the Statistical Package for Social Science (SPSS version 15). At  $p\text{-value} > 0.05$  was considered as statistically no significant,  $p\text{-value} \leq 0.05$  was statistically significant and  $p\text{-value} \leq 0.01$  was statistically highly significant.

## RESULTS:

**Table (1): Socio –Demographic characteristic of the study sample.**

Variable		N=210	%
Age	≤20Years	80	38.1
	21-30 Years	87	41.4
	31-40 Years	34	16.2
	≥40 Years	9	4.3
Mother level of education	Unable to read and write	93	44.3
	Able to read and write	49	23.3
	Primary	34	16.2
	Intermediate	14	6.7
	Secondary	8	3.8
	Institute and college	12	5.7
Father level of education	Unable to read and write	29	13.8
	Able to read and write	45	21.4
	Primary	43	20.5
	Intermediate	23	11.0
	Secondary	19	9.0
	Institute and college	51	24.3
Mothers occupation	Employed	20	20.0
	House wives	187	80.0
Fathers occupation	Employed	31	14.8
	Free work	115	54.8
	Unemployed	64	30.5
Socio-economic status	Low	46	21.9
	Middle	150	71.4
	High	14	6.7
Crowding Index	<1.5	26	13
	1.6-2.9	115	54.9
	3>	69	32.1

Table (1) shows that most of mother's age (41.4%) were between (21-30) years old, (44.3%) were unable to read and write, while (24.3%) of father were graduated from institute or college, (80.0) of mother's were housewives, while (54.8%) of father's occupation were free works, (71.4%) were living with middle socio- economical status and (54.9%) have crowding index between (1.6- 2.9).

**Table (2) Distribution of pacifier using among the study sample**

Items		F N =210	%
1-Using the pacifier	Yes	191	91.0
	No	19	9.0
2-Age of using pacifier (months)	1-3	158	75.3
	4-6	19	9.0
	7-11	14	6.0
3-Age of removing pacifier(months)	4-6	46	21.9
	7-12	39	18.6
	13-24	25	11.9
	25-36	24	11.4
	37-48	23	11.0

Table 2 shows that majority (91% ,191) of mothers were using the pacifier and (9% .19) were not using, (75.3% , 158) of them started to using pacifier between age (1-3) months and (21.9% ,46 ) of them try stopping use the pacifier between age (4-6) months and decreased (11.0% , 23 )at age ( 37 – 48 ) months

**Table (3) Mothers opinions about reason for using pacifier**

Item	Response	F N =191	%
1. Return mother to work	Yes	21	20.0
	No	170	80.0
2. Crying a lot at night	Yes	121	63.4
	No	70	36.6
3. Quite sleeping	Yes	123	64.4
	No	68	35.6
4. Misses mother	Yes	74	38.7
	No	117	61.3
5. Alleviate the discomfort of teeth	Yes	15	7.9
	No	176	92.1
6. Provide comfort during stressful episodes	Yes	73	38.2
	No	118	61.8
7. Hungry	Yes	34	17.8
	No	157	82.2
8. It is always available at home	Yes	89	46.6
	No	102	53.4
9. Not answering	20		9.52

Table 3 shows that majority of mothers ( 64.4% ,123) were using pacifier for getting quite sleeping to their children, ( 63.4% ,121) were using pacifier because their children crying at mid night and (46.6%, 89 ) of them were using pacifier because it is always available at home.

**Table (4): Intervention techniques used by mothers to stop the sucking of pacifier in their children.**

Items	Response	F N=191	%
1. Reinforcement	Yes	104	54.5
	No	87	45.5
2. Interrupting the use of pacifier	Yes	170	89.0
	No	21	11
3. Using unpleasant flavor substances on the pacifier	Yes	28	14.7
	No	163	85.3
4. Explanations to the child	Yes	125	65.4
	No	66	34.6
5. Spontaneous removal by the child	Yes	59	30.9
	No	132	69.1
6. Not answering	20		9.52

Table 4 shows that there ( 89.0% ,170 ) of the mothers were using interrupting the use of pacifier with their children ,( 65.4%,125 ) were using explanations to their children while ( 54.5%,104 ) using reinforcement their children to stop the sucking of pacifier as intervention techniques.

**Table (5) Association between mother's socio-demographic data and her opinion about reason for using pacifier and her intervention to stop sucking of pacifier**

Variable	Mother's opinion about reason for using pacifier.(P. Value)	Sig.	Intervention used by mother to stop sucking of pacifier (P. Value)	Sig.
1. Mother's age	0.000	HS	0.582	NS
2. Mother's educational level	0.57	NS	0.008	HS
3. Fathers' educational level	0.001	HS	0.117	NS
4. Mother's Occupation	0.000	HS	0.125	NS
5. Fathers' occupation	0.002	HS	0.033	S
6. Property	0.7	NS	0.8	NS
7. Socio –economical status	0.00	HS	0.001	HS
8. Using pacifier	0.75	NS	0.9	NS
9. Period of pacifier using	0.004	HS	0.026	S
10. Age of removal pacifier	0.000	HS	0.88	NS
11. Crowding index	0.028	S	0.46	NS

Table (5) shows that highly significant association between mother's age, father's educational level , parent's occupation , socio-economical status, period of pacifier using, age of removal pacifier and mother's opinion about reason for using pacifier at p –value 0.01. And there were highly significant association between mother's educational level, socio-economical status and mother's intervention used to stop sucking of pacifier at p –value 0.01.

## DISCUSSION:

The findings of the present study were the majority of mother's age (21-30) years old which is expected as the reproductive age in between (25-35) years, the highest percentages of mothers were housewives with low educational level, mother's education had a great impact on mother's knowledge, attitude and practices of infant and young child caring, most of study sample they living in moderate socio-economical status with crowding house, and using pacifier was high prevalence in this study .but these observations are not similar found that a pacifier -sucking high prevalent among the children of parents of higher educational levels <sup>(12, 13)</sup>. The prevalence of pacifier-sucking in this study was higher than that reported 75% in the Saudi Arabia study <sup>(12)</sup>. As mentioned that non-nutritive sucking is now considered part of routine developmental care of the infant facilitated by the use of pacifiers <sup>(14)</sup>.Non-nutritive sucking provides comfort, state regulation and an opportunity to organize motor development in preterm and term baby <sup>(15)</sup>.In the present study pacifier was more prevalence in 1- 3 months of infant age and less with age, peaks at 2 to 3 months of age, and it is often introduced within the first month of life. Its agree with a study reported that among the 237 newborns contacted in the first month of life, 61.6% had been using pacifiers, most of them since the first week of life<sup>(11)</sup>. Pacifiers are a regular item in the baby's layette with the different brands, shapes, colors, and designs have become an irresistible consumption attraction for mothers <sup>(15)</sup>. Thus, by incorporating common-sense knowledge, the mother considers the use

of pacifiers as something natural and rational in her future childcare projects. Many studies have shown that prevalence of pacifier use is high in the first month of live even among those babies who are born at Child-Friendly Hospitals, where mothers are instructed not to offer pacifiers to avoid nipple confusion, difficulty to establish breastfeeding, or early weaning <sup>(16)</sup>. In addition, the present result shows that some of infants stop using pacifier at age 4 -6 months. This finding is not similar to a study, they stated that most children stop pacifier use on their own between 2 and 4 years of age <sup>(17)</sup>. The majority of mothers were using pacifier for getting quite sleeping for their children in highest percentages of mothers were housewives with low educational level, that is not agree with Saudi children <sup>(14)</sup>. According to <sup>(15)</sup> a study reported that crying is a communication in newborn, and is not easily interpreted by the mother, causing anxiety and irritability in adults when not resolved correctly. A study report that breastfeeding frequently through the night offers the same sucking / lighter sleep benefit that is believed to be responsible for the reduced risk seen with pacifiers <sup>(16)</sup>. The present study report that some of mothers using pacifier because their children crying a lot at night. This result consistent with a study stated that pacifiers are commonly used to reductions in frequency and duration of crying at night <sup>(17)</sup>. Highly significant association between (mother's age, father's educational level, parent's occupation, socio-economical status, period of pacifier using, and age of removal pacifier) and mother's opinion about reason for using pacifier at p –value 0.01. Thus crying favors maternal insecurity, generating doubts as to her ability to care for the child <sup>(8)</sup>. The decision to use pacifiers in infants and children remains controversial and an individual choice for today's parents <sup>(6)</sup>. In Nigeria study reported that prevalence of pacifier-sucking were represented (48%) more in high and mordant socio-economical status than in lower socio-economical status (35%) <sup>(15)</sup>. Mother's attitude regarding the intervention techniques to stop the sucking of pacifier in this study shows high percentage of them were using interrupting (Abrupt interruption means the parents refused to give the pacifier to the children, determining the habit removal) with their children it is agree with Brazilin study <sup>(17)</sup>. And there were highly significant association between mother's educational level, socio-economical status and mother's intervention which used to stop sucking of pacifier) at p –value 0.01 (Table 5).

## **CONCLUSION :**

Sucking habits had a high prevalence in this study, highly significant association between mother's age, father's educational level, parent's occupation, socio-economical status, period of pacifier using, age of removal pacifier and mother's opinion about reason for using pacifier at p value 0.01. And there were highly significant association between mother's educational level, socio-economical status) with (mother's intervention used to stop sucking of pacifier) at p –value 0.01.

## **RECOMMENDATION:**

The study recommended to providing the information about safe and appropriate use of pacifiers for mothers who attending PHCC, and to increase the parents' awareness toward pacifiers.

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